VOL. 699, NOS. 1 + 2 JOURNAL OF CHROMATOGRAPHY A 5 MAY 1995

CONTENTS

(Abstracts/Contents Lists published in Analytical Abstracts, Biochemical Abstracts, Biological Abstracts, Chemical Abstracts, Chemical Titles, Chromatography Abstracts, Current Awareness in Biological Sciences (CABS), Current Contents/Life Sciences, Current Contents/Physical, Chemical & Earth Sciences, Deep-Sea Research/Part B: Oceanographic Literature Review, Excerpta Medica, Index Medicus, Mass Spectrometry Bulletin, PASCAL-CNRS, Referativnyi Zhurnal, Research Alert and Science Citation Index)

REVIEW

Complex-forming equilibria in ion chromatography
by P. Janoš (Ústí nad Labem, Czech Republic) (Received 30 December 1994) 1

REGULAR PAPERS

Column Liquid Chromatography

Minimization of baseline disturbances in peptide mapping by means of principal-component multivariate visualization
by C. Woodward (Wilmington, DE, USA) and F.O. Geiser (Glen Mills, PA, USA) (Received 30 November 1994) . . 11

Use of matrix-assisted laser desorption/ionization mass spectrometry for molar mass-sensitive detection in liquid chromatography of polymers
by H. Pasch and K. Rode (Darmstadt, Germany) (Received 13 January 1995) 21

Potentiometric detection using a metallic copper electrode in reversed-phase and ion-exclusion chromatography with eluents containing ion-interaction reagents
by B.K. Glod (Warzaw, Poland), P.W. Alexander and P.R. Haddad (Hobart, Australia) and Z.L. Chen (Sydney, Australia) (Received 10 January 1995) 31

Electrocatalytic oxidation and ion chromatographic detection of Br^-, I^-, SO_3^{2-}, $S_2O_3^{2-}$ and SCN^- at a platinum particle-based glassy carbon modified electrode
by A. Liu, L. Xu, T. Li, S. Dong and E. Wang (Jilin, China) (Received 3 January 1995) 39

Effect of temperature on retention time reproducibility and on the use of programmable fluorescence detection of fifteen polycyclic aromatic hydrocarbons
by M. Mäkelä and L. Pyy (Oulu, Finland) (Received 24 January 1995) 49

Synthesis of monodisperse macroreticular styrene–divinylbenzene gel particles by a single-step swelling and polymerization method
by K. Ogino, H. Sato, K. Tsuchiya, H. Suzuki and S. Moriguchi (Tokyo, Japan) (Received 22 December 1994) . . . 59

Preparation and characterization of monodisperse oligo(ethylene glycol) dimethacrylate polymer beads for aqueous high-performance liquid chromatography
by K. Ogino, H. Sato, Y. Aihara, H. Suzuki and S. Moriguchi (Tokyo, Japan) (Received 22 December 1994) 67

Effect of co-modifiers in cyclodextrin-modified mobile phases on the reversed-phase high-performance liquid chromatographic separation of polyaromatic hydrocarbons
by N. Husain, A.Y. Christian and I.M. Warner (Baton Rouge, LA, USA) (Received 9 January 1995) 73

Gradient reversed-phase high-performance liquid chromatography of saturated, unsaturated and oxygenated free fatty acids and their methyl esters
by J.-T. Lin, T.A. McKeon and A.E. Stafford (Albany, CA, USA) (Received 17 January 1995) 85

Liquid chromatography of tylosin A and related substances on poly(styrene–divinylbenzene)
by J. Paesen, P. Claeys, W. Cypers, E. Roets and J. Hoogmartens (Leuven, Belgium) (Received 19 December 1994) 93

Isolation of decomposition products of tylosin using liquid chromatography
by J. Paesen, W. Cypers, R. Busson, E. Roets and J. Hoogmartens (Leuven, Belgium) (Received 17 November 1994) 99

Determination of saffron (*Crocus sativus* L.) components in crude plant extract using high-performance liquid chromatography–UV–visible photodiode-array detection–mass spectrometry
by P.A. Tarantilis (Athens, Greece), G. Tsoupras (Meyrin, Switzerland) and M. Polissiou (Athens, Greece) (Received 16 December 1994) 107

(Continued overleaf)

Contents (continued)

Field Flow Fractionation

Hollow-fibre flow field-flow fractionation of polystyrene sulphonates
by J.E.G.J. Wijnhoven, J.P. Koorn, H. Poppe and W.Th. Kok (Amsterdam, Netherlands) (Received 7 February 1995) 119

Gas Chromatography

Pair-wise interactions by gas chromatography. V. Interaction free enthalpies of solutes with primary chloro- and bromoalkanes
by G. Défayes and K.S. Reddy (Lausanne, Switzerland), A. Dallos (Veszprém, Hungary) and E. Kováts (Lausanne, Switzerland) (Received 22 December 1994) 131

Dependence of retention of organic compounds on carrier gas pressure in capillary adsorption chromatography
by V.G. Berezkin, I.V. Malyukova and V.R. Alishoev (Moscow, Russian Federation) (Received 13 December 1994) . 155

Prediction of programmed temperature retention indices on capillary columns of different polarities
by T.C. Gerbino and G. Castello (Genova, Italy) (Received 27 December 1994) 161

Calculation algorithm for the retention times of polychlorinated biphenyls and the control of its efficiency on a non-polar capillary column
by W. Vetter and B. Luckas (Jena, Germany) (Received 6 January 1995) 173

Reactive-flow luminescence with flame ionization detection
by W.A. Aue and K.B. Thurbide (Halifax, Canada) (Received 19 January 1995) 183

Second-channel designs for a single-channel flame photometric detector
by W.A. Aue, C.G. Eisener, J.A. Gebhardt and N.B. Lowery (Halifax, Canada) (Received 19 January 1995) 195

Evaluation of adsorbents for sampling and quantitative analysis of microbial volatiles using thermal desorption–gas chromatography
by A.-L. Sunesson, C.-A. Nilsson and B. Andersson (Umeå, Sweden) (Received 28 December 1994) 203

Backbone modification of Chirasil-Val. I. Effect of loading on the separation of enantiomers by gas chromatography
by B. Koppenhoefer, U. Mühleck and K. Lohmiller (Tübingen, Germany) (Received 10 February 1995) 215

Determination of volatile chlorinated hydrocarbons in plant leaves by gas chromatography–mass spectrometry
by R. Keymeulen, A. Voutetaki and H. Van Langenhove (Ghent, Belgium) (Received 7 February 1995) 223

Determination of polychlorinated biphenyls in biotic matrices using gas chromatography–microwave-induced plasma atomic emission spectrometry
by J. Hajšlová, P. Cuhra, M. Kempný, J. Poustka, K. Holadová and V. Kocourek (Prague, Czech Republic) (Received 30 December 1994) 231

Identification and determination of butyltin compounds in water by ion trap gas chromatography–mass spectrometry after conversion to methyl or hydride derivatives
by Z. Plzák (Řež near Prague, Czech Republic) and M. Polanská and M. Suchánek (Prague, Czech Republic) (Received 3 January 1995) 241

Supercritical Fluid Extraction

Comparison of supercritical fluid extraction and Soxhlet extraction for the analysis of native polycyclic aromatic hydrocarbons in soils
by G. Reimer and A. Suarez (Vancouver, Canada) (Received 30 December 1994) 253

Comparison of sorbent and solvent trapping after supercritical fluid extraction of volatile petroleum hydrocarbons from soil
by Y. Yang, S.B. Hawthorne and D.J. Miller (Grand Forks, ND, USA) (Received 6 January 1995) 265

Planar Chromatography and Column Liquid Chromatography

Cercospora beticola toxins. III. Purification, thin-layer and high-performance liquid chromatographic analyses
by M.-L. Milat and J.-P. Blein (Dijon, France) (Received 10 January 1995) 277

Planar Chromatography

Charge transfer chromatographic study of the binding of commercial pesticides to various albumins
by T. Cserháti and E. Forgács (Budapest, Hungary) (Received 24 January 1995) 285

Thin-layer chromatographic fractionation of Ames mutagenic chlorosemiquinone in chlorinated 4-methylphenol solution
by S. Onodera, A. Uchida and C. Nakajima (Tokyo, Japan) (Received 29 December 1994) 291

Electrophoresis

Wall adsorption in capillary electrophoresis. Experimental study and computer simulation
by S.V. Ermakov, M.Yu. Zhukov, L. Capelli and P.G. Righetti (Cosenza, Italy) (Received 6 December 1994) 297

Thermo–optical absorbance detection of native proteins separated by capillary electrophoresis in 10 μm I.D. tubes
by J.M. Saz (Madrid, Spain), B. Krattiger and A.E. Bruno (Basle, Switzerland) and J.C. Díez-Masa and H.M. Widmer (Madrid, Spain) (Received 20 January 1995) 315

Indirect detection in capillary electrophoresis. Comparison between indirect UV and indirect laser-induced fluorescence detection for the determination of isoprenyl pyrophosphates
by P.E. Andersson, W.D. Pfeffer and L.G. Blomberg (Stockholm, Sweden) (Received 3 January 1995) 323

Structural selectivity provided by starburst dendrimers as pseudostationary phase in electrokinetic chromatography
by N. Tanaka, T. Fukutome, T. Tanigawa, K. Hosoya, K. Kimata and T. Araki (Kyoto, Japan) and K.K. Unger (Mainz, Germany) (Received 2 January 1995) 331

Chemical modification of capillary column for electrophoretic separations of transition metal ions
by G.J. Chen, N.M. Lee, C.C. Hu and C.Y. Liu (Taipei, Taiwan) (Received 28 December 1994) 343

Effect of electrolyte composition in the capillary electrophoretic separation of inorganic/organic anions in the presence of cationic polymers
by C. Stathakis and R.M. Cassidy (Saskatoon, Canada) (Received 13 October 1994) 353

Formation of S-nitroso compounds from sodium nitroprusside, nitric oxide or nitrite and reduced thiols: analysis by capillary isotachophoresis
by D. Tsikas, R.H. Böger, S.M. Bode-Böger, G. Brunner and J.C. Frölich (Hannover, Germany) (Received 24 January 1995) 363

Separation of six phenylureas and chlorsulfuron standards by micellar, mixed micellar and microemulsion electrokinetic chromatography
by L. Song, Q. Ou and W. Yu (Lanzhou, China) and G. Li (Jinan, China) (Received 29 December 1994) 371

SHORT COMMUNICATIONS

Column Liquid Chromatography

Selective stability-indicating high-performance liquid chromatographic assay for recombinant human regular insulin
by G.L. Hoyer, P.E. Nolan, Jr., J.H. LeDoux and L.A. Moore (Tucson, AZ, USA) (Received 2 January 1995) . . . 383

Chiral separation of MDL 73,005EF enantiomers using an α_1-acid glycoprotein column
by B.M. Bunton and T.A. Walker (Kansas City, MO, USA) (Received 17 January 1995) 389

Gas Chromatography

Masking as a mechanism for evaporative loss of trace analyte, especially after solid-phase extraction
by X.W. Crowley, V. Murugaiah, A. Naim and R.W. Giese (Boston, MA, USA) (Received 23 December 1994) . . . 395

Separation of low-boiling pyridine bases by gas chromatography
by M.C. Titon and A.M. Nardillo (La Plata, Argentina) (Received 13 January 1995) 403

BOOK REVIEWS

Directory of Capillary Electrophoresis (edited by D. Coleman), reviewed by P. Boček (Brno, Czech Republic) 408

Thin-Layer Chromatography —Techniques and Applications (by B. Fried and J. Sherma), reviewed by K. Macek (Prague, Czech Republic) 409

Analytical Applications of Immobilized Enzyme Reactors (edited by S. Lam and G. Malikin), reviewed by H. Lingeman (Amsterdam, Netherlands) 411

Advances in Electrophoresis (edited by A. Chrambach, M.J. Dunn and B.J. Radola), reviewed by R.W. Giese (Boston, MA, USA) 413

AUTHOR INDEX 415